

ABSTRACT

An apparatus and method for preventing illegitimate distribution of digital contents on Internet obtains a first wavelet image having a user information-embedding region by performing a wavelet transformation (WT). The user information embedding region of the first wavelet image is wavelet-transformed to obtain a second wavelet image composed of a discrete cosine (DC) region and high-frequency regions second wavelet image. A high-frequency components removed image is obtained by removing high-frequency components in the high-frequency regions of the second wavelet image, and subjected to an inverse WT (IWT) to be outputted as an IWT image. A user information embedding unit embeds user information to the IWT image, wherein data of the user information are sequentially embedded to positions where a difference value between the user information embedding region and the new user information embedding region is small, to thereby reset the user information embedding region as the user information.